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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,713	05/24/2004	Wen-Suz Tao	WISP0050USA	3712
27765	7590	06/16/2006	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION P.O. BOX 506 MERRIFIELD, VA 22116			SAMS, MATTHEW C	
			ART UNIT	PAPER NUMBER
			2617	

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/709,713	Applicant(s) TAO, WEN-SUZ	
	Examiner Matthew C. Sams	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 5/24/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claim 5, "one-unified-body structure" is not described or supported clearly in the specification.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1-9, air is a dielectric material. The specification is not clear as to whether or not air is between the radiator and the ground terminal. For purpose of

the art rejection, the examiner is assuming air is present and desired between the radiator and ground terminal.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3, 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Tarvas et al. (US-6,252,552 hereafter, Tarvas).

Regarding claim 1, Tarvas teaches an antenna structure (Fig. 1 [100]) for use in a wireless communication system comprising a housing (Col. 6 lines 14-28, Fig. 10 and Fig. 12), an antenna installed inside the housing comprising a radiator for transmitting and receiving radio signals (Col. 5 line 66 through Col. 6 line 28, Fig. 10 [1002] and Fig. 12), a ground terminal connected to the radiator for grounding (Fig. 10 [1001 & 1004]), and a dielectric material installed inside the housing and not installed between the radiator and the ground terminal. (Col. 6 lines 11-28)

Regarding claim 3, Tarvas teaches a dielectric material is locked to the inner side of the housing. (Col. 6 lines 14-28)

Regarding claim 5, Tarvas teaches the dielectric material is connected to the inner side of the housing. (Col. 5 line 66 through Col. 6 line 28 and Fig. 12)

Regarding claim 7, Tarvas teaches a dielectric material is made of plastic. (Col. 6 lines 14-28)

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tarvas.

Regarding claim 2, Tarvas teaches the dielectric material is attached to the inner side of the housing. (Col. 5 line 66 through Col. 6 line 28) Tarvas differs from the claimed invention by not explicitly reciting that the dielectric material is “glued” to the inner side of the housing.

However, it would have been obvious to one of ordinary skill in the art to implement the antenna of Tarvas after modifying it by attaching the dielectric material with glue since glue can be non-conductive and would not interfere with the specific dielectric constant.

Regarding claims 8 and 9, Tarvas teaches the dielectric material is a suitable dielectric material. (Col. 6 lines 11-13) It would have been obvious to one of ordinary skill in the art to implement the invention of Tarvas using cermet or glass fiber substrate

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as the dielectric material if either of those materials provided the required dielectric constant for the desired antenna design.

10. Claims 4 & 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tarvas in view of Taflove et al. (US-6,292,144 hereafter, Taflove).

Regarding claim 4, Tarvas teaches the dielectric material is within the housing of the communication device (Fig. 12 and Col. 5 line 66 through Col. 6 line 28), but differs from the claimed invention by not explicitly reciting the dielectric material is embedded in the side of the housing.

In an analogous art, Taflove teaches an antenna for portable communication devices that includes conforming the dielectric on or within the surface of the portable communication device. (Col. 2 lines 8-9 and Col. 3 line 62 through Col. 4 line 7) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the antenna of Tarvas after modifying it to incorporate the dielectric within the surface of the device of Taflove. One of ordinary skill in the art would have been motivated to do this since embedding the dielectric material into the side of the case saves on the limited internal space in order to make the portable device smaller.

Regarding claim 6, Tarvas in view of Taflove teaches the housing includes an LCD. (Taflove Col. 7 lines 7-10)

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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US-5,376,943 to Blunden et al. regarding a moving vehicle transponder.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Sams whose telephone number is (571)272-8099. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571)272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MCS
5/31/2006


LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER